



## Impact of a category-3 hurricane on the need for surgical hospital care

---

**Author(s):** Sjoberg L, Yearwood R  
**Year:** 2007  
**Journal:** Prehospital and Disaster Medicine. 22 (3): 194-198

---

### Abstract:

**INTRODUCTION:** Hurricane Ivan, a strong category-3 hurricane, struck Grenada on 07 September 2004 and devastated the country. Grenada is a small, developing country, whose socio-economic environment and health service is typical of most countries located within the Caribbean hurricane belt. Previous reports describing the consequences of hurricanes on health-related issues have focused mainly on the experience of wealthier countries. **OBJECTIVE:** The objective of this study was to document the types of patients and medical problems faced by a hospital surgical service as a result of a forceful hurricane in a developing country and to help surgical divisions in developing countries prepare for strong hurricanes. **METHODS:** This is a retrospective study using medical records from the surgical ward of the Grenada General Hospital. Patients admitted to the surgical ward during the month following Ivan were assessed with respect to diagnosis, age, gender, and length of hospitalization. The patients admitted during the same period the previous year were used as a control group. **RESULTS:** The effects of the hurricane included a significant increase in the proportion of patients seen for diabetic feet, gunshot wounds, and infections due to wounds. The median length of the treatment time increased by 25%. In 2004, the total number of patients was 185 and in 2003, there were 167 patients admitted. **CONCLUSIONS:** The results of this study indicate that preparations for future hurricanes should include securing the capacity to handle the increased needs for hospital care, and ensuring that stocks of medicines, such as insulin and antibiotics, are sufficient, properly stored, and easily available to patients (e.g., by storing medicine at hurricane shelters equipped with generators and cold storage facilities). Diabetics should be instructed to use proper footwear to reduce the risk of cuts from debris.

**Source:** Ask your librarian to help locate this item.

### Resource Description

#### Communication:

resource focus on research or methods on how to communicate or frame issues on climate change;  
surveys of attitudes, knowledge, beliefs about climate change

A focus of content

#### Communication Audience:

audience to whom the resource is directed

Health Professional



# Climate Change and Human Health Literature Portal

## **Exposure :**

weather or climate related pathway by which climate change affects health

Extreme Weather Event, Human Conflict/Displacement, Human Conflict/Displacement

**Extreme Weather Event:** Hurricanes/Cyclones

## **Geographic Feature:**

resource focuses on specific type of geography

Ocean/Coastal

## **Geographic Location:**

resource focuses on specific location

Non-United States

**Non-United States:** Non-U.S. North America

## **Health Impact:**

specification of health effect or disease related to climate change exposure

Injury

## **Medical Community Engagement:**

resource focus on how the medical community discusses or acts to address health impacts of climate change

A focus of content

## **Mitigation/Adaptation:**

mitigation or adaptation strategy is a focus of resource

Adaptation

**Population of Concern:** A focus of content

## **Population of Concern:**

populations at particular risk or vulnerability to climate change impacts

Low Socioeconomic Status

**Other Vulnerable Population:** Diabetics

## **Resource Type:**

format or standard characteristic of resource

Research Article

## **Timescale:**

time period studied

Time Scale Unspecified

## **Vulnerability/Impact Assessment:**

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content